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Data sheet 6XV1821-0BN50

Product type designation
PROFIBUS Plastic Fiber Optic standard cable

Product description
Fiber-optic cable with polyoptical fiber, preferred length, preassembled
PROFIBUS Plastic Fiber Optic, Standard cable with 4 BFOC connectors, Length 50 m



Suitability for use	Cable for indoor applications
Version of the assembled FO cable	Assembled with four BFOC connectors
Cable designation	I-V4Y(ZN)Y 2P 980/1000
Wire length	50 m

Optical data	
Damping ratio per length	
• at 650 nm / maximum	160 dB/km
• at 660 nm / maximum	230 dB/km
Bandwidth length product	
• at 650 nm	1 GHz·m

Mechanical data	
Number of fibers / per FOC core	1
Number of FO cores / per FOC cable	2
Version of the FO conductor fiber	Step index fiber 980/1000 µm
Outer diameter	
• of the optical fibers	980 µm

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• of the optical fiber sheath	1000 µm
• of the FOC core sheath	2.2 mm
Symmetrical deviation / of the outer diameter of the FOC core sheath	0.1 mm
Outer diameter / of the cable	7.8 mm
Symmetrical deviation / of the outer diameter of the line	0.3 mm
Material	
• of the fiber-optic cable core	Polymethylmethacrylate (PMMA)
• of the optical fiber sheath	Fluoridated special polymer
• of the FOC core sheath	PA
• of the fiber-optic cable sheath	PVC
• of the strain relief	Kevlar fibers
Color	
• of the FOC core sheath	orange/black
• of cable sheath	Violet
Bending radius	
• with single bend / minimum permissible	100 mm
• with multiple bends / minimum permissible	150 mm
Tensile load	
• during installation / short-term	100 N
• during operation / maximum	100 N
Short-term shear force per length	100 N/cm
Weight per length	65 kg/km

Ambient conditions

Ambient temperature	
• during operation	-30 ... +70 °C
• during storage	-30 ... +70 °C
• during transport	-30 ... +70 °C
• during installation	50 °C
Burning behavior	flame-resistant acc. to IEC 60332-1-2
Chemical resistance	
• to mineral oil	conditional resistance
• to grease	conditional resistance
Radiological resistance / to UV radiation	not resistant
Protection class IP	IP20

Product features, product functions, product components / general

Product feature	
• halogen-free	No
• silicon-free	Yes
Product component / Rodent protection	No
Wire length	

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• for POF FOC / with PROFIBUS / maximum	80 m

Standards, specifications, approvals

Certificate of suitability	UL approval: cULus OFN FT1 (NEC Article 770, UL 1651) / CSA approvl: OFN (CSA-Standard C22.2 No232)
• RoHS conformity	Yes

Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
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